

## North Carolina Department of Transportation Product Evaluation Program Guidelines

#### **Purpose**

The purpose of the Product Evaluation Program is to provide a comprehensive evaluation of products to make The North Carolina Department of Transportation's (NCDOT) network safer, move people and goods more efficiently, and make the infrastructure last longer. Another purpose of the program is to determine if evaluated products are viable for use in North Carolina's infrastructure by monitoring installations and providing documentation on their durability and performance.

#### Introduction

The Department receives many requests for evaluation and approval of products not currently used in transportation projects. NCDOT strives to ensure the objective, impartial, and consistent evaluation of products for use in the construction, maintenance, and operation of the State's transportation system. Only products that are fully developed, commercially available, and serve a useful function within NCDOT operations will be evaluated.

Products evaluated are typically those that have not been previously evaluated by NCDOT and where a NCDOT standard specification does not exist, or products that have a NCDOT standard specification but require evaluation prior to approval.

#### Inquiries

Refer all product inquiries to the Product Evaluation Program Engineer:

- Product Evaluation Program Desk: (919) 508-1860
- Product Evaluation Program Email: <u>productevaluation@ncdot.gov</u>
- Product Evaluation Program Website: Currently being developed

#### **Definitions**

Oversight Committee – A group comprised of NCDOT leadership personnel to make final decisions on product appeals and resolve non-consensus TWG issues as necessary.

Product – A fully developed, commercially available item for use in the construction, maintenance, and/or operation of the State's transportation system.

Product Evaluation Program (PEP) Engineer – The one-person central contact managing the Product Evaluation Program.

Qualified Product List (QPL) – a list of products that have been evaluated and approved by NCDOT for use on NCDOT projects.

Status Code – The standing assigned to a product as it moves through the decision process. The four status codes are as follows:

**Under Evaluation**: Product is undergoing evaluation consisting of technical and/or laboratory review and/or field testing.

**Approved**: Product has been evaluated and is approved for use.

**Approved for Provisional Use**: Product has been evaluated and is approved for use based on site specific and/or project specific conditions being met.

**Unapproved**: Product has been evaluated and currently does not meet either the specifications or the needs of the Department. Additionally, a product status may be changed to "Unapproved" if any of the following conditions occur: (Note: this list is not all inclusive)

- Unsatisfactory performance
- o Product failure resulting in serious injury or death
- Unsafe product or installation
- Warranty not honored
- o Insolvency
- o False information submitted on any application, statement, certification, reports or records
- Debarred by Federal or State Agency
- o Failure to furnish a non-collusion affidavit upon request
- Evidence of collusion among vendors
- o Failure to meet the requirements of an existing guarantee

Technical Work Group (TWG) – A group comprised of NCDOT technical experts (typically 2-5 members) who review submitted products and determine the status of the product. The TWG is composed of representatives from individual NCDOT units that have an established evaluation process and responsibility over specific product categories. The leader of this group is referred to as the TWG Chair.

Vendor – The entity (typically the product manufacturer or distributor) that submits an application for product evaluation.

VENDOR – The software application used by NCDOT that contains product evaluation records.

# Roles and Responsibilities

Four entities comprise the Product Evaluation Program. They are the Vendor, Product Evaluation Program Engineer, Technical Work Groups, and the Oversight Committee.

#### Vendor:

Role: Submit product for evaluation

#### Responsibilities:

- Submit a complete application and supporting documentation
- Respond in a prompt manner to PEP Engineer and/or TWG member requests
- As necessary, per the request of NCDOT, provide installation assistance of a product for the purposes of evaluation
- Submit recertification of approved product on an annual basis
- Initiate appeals process, if applicable

#### **Product Evaluation Program Engineer:**

The Department has adopted a one-person central contact for all products to be evaluated through the Product Evaluation Program. The PEP Engineer manages the Product Evaluation Program.

Role: Manage and monitor the Product Evaluation Program

#### Responsibilities:

- Receive product application from vendor
- Review application for completeness
- Follow up with vendor if application is incomplete
- Determine appropriate TWG to evaluate product
- As necessary, identify team members for ad-hoc TWGs
- Follow up with TWG on product status
- Communicate product evaluation process information to the vendor
- Maintain current product status in VENDOR
- Notify vendor of product status
- Oversee distribution of annual renewal letters, and update product status in VENDOR based on response of renewal letter
- Follow up with TWG on products being monitored in the field
- Receive, review and process appeals from vendor
- Elevate non-consensus status decisions to Oversight Committee
- Generate and distribute product status reports as necessary

#### **Technical Work Groups:**

The Department has adopted a membership structure that consists of product category-specific Technical Work Groups. These groups are empowered to define product evaluation and determine the status of products.

Role: Evaluate and assess products within their area of technical expertise.

#### Responsibilities:

- Identify a group leader (TWG Chair)
- Identify additional members for product evaluation, as needed
- Utilize TWG Documentation Form to document their evaluation process
- Create and document a procedure for evaluating their respective products
- Determine if NCDOT has a need for the product and if an existing NCDOT standard specification applies
- Communicate with vendors and schedule meeting(s), as necessary to complete product evaluation
- Determine an evaluation and monitoring process necessary to determine the product status
- Communicate with PEP Engineer regarding product status
- Conduct preliminary investigation regarding other experiences with product (including but not limited to other states, municipalities, contractors, FHWA, NCHRP, etc.)
- Coordinate with vendor in selecting trial site, if necessary to complete evaluation
- Oversee installation and monitor product performance, if necessary to complete evaluation
- Communicate product status decision to PEP Engineer

Attachment A summarizes the current TWG membership structure.

Note: Individual TWG members may change as necessary, but the established Unit representation will remain as summarized in Attachment A.

#### **Oversight Committee:**

The Department has adopted the use of an Oversight Committee to make final decisions on product appeals and resolve non-consensus TWG issues as necessary.

Role: Provide oversight of the program.

#### Responsibilities:

Make final decisions on product appeals

- Resolve non-consensus TWG issues
- Recommend program improvements

Attachment B summarizes the current Oversight Committee membership structure.

**Vendor Submittals** Products submitted to NCDOT for evaluation must meet the following criteria:

- The vendor must identify the proposed use of the product
- The product must be directly related to the transportation system
- The product must be fully developed, marketable, and commercially available

#### <u>Applications</u>

The vendor must complete the Product Evaluation Program Application form, including all required fields, and include any supporting documentation. application is incomplete, the vendor will be notified in writing by the PEP Engineer to provide missing information within 30 days of notification. If the submittal package is still incomplete after 30 days, the product will not be considered for any further review. The vendor must submit a new evaluation application submittal to be considered for future evaluation.

#### Samples

Product samples should **not** be submitted with the application. NCDOT may request product samples later in the process. If requested, the vendor will have 30 days to submit a product sample. Should the vendor fail to submit the product sample within 30 days, the product will not be considered for any further review. The vendor must submit a new evaluation application submittal to be considered for future evaluation.

#### **PEP Process**

The following is a description of the PEP Process (see Attachment C for a high level process flow).

#### 1. Receipt and Distribution of Product Application

- Upon receipt of a product application, the PEP Engineer will acknowledge receipt of the application to the vendor in writing and assign an identification number and status code designation of "Under Evaluation" in VENDOR
- The PEP Engineer will process the application and forward to the appropriate TWG for evaluation

#### 2. Evaluation Process

- TWG determines if product meets NCDOT Specifications
- If product meets NCDOT Specifications, TWG performs evaluation to determine if the product is Unapproved, Approved, or Approved for Provisional Use
- If product does not meet NCDOT Specifications, TWG determines if the product is needed
- If TWG determines that the product is needed, TWG performs evaluation to determine if the product is Unapproved, Approved, or Approved for Provisional Use
- If TWG determines the product is not needed, the product is Unapproved.
- If TWG requests additional information from the vendor, the vendor will have 30 days to comply with the request. If the vendor does not respond within 30 days, the product will not be considered for any further review and the vendor must submit a new evaluation application submittal to be considered for future evaluation. If the vendor requests additional time to submit the requested information, it will be at the discretion of the TWG to grant additional time
- TWG notifies PEP Engineer of decision on product status
- PEP Engineer updates product status in VENDOR
- Vendor is notified in writing of product status

#### 3. Appeals Process

- If vendor does not agree with the determined product status, the vendor may elect to appeal the product status. The vendor must appeal in writing to the PEP Engineer within 30 days of product status notification and the appeal must include new or additional product information
- PEP Engineer determines if the appeal documentation is complete
- If appeal documentation is complete and contains pertinent additional information, the PEP Engineer will forward appeal package to TWG for reevaluation
- If appeal documentation is not complete or does not contain pertinent additional information, the PEP Engineer notifies vendor that the product status stands
- TWG performs re-evaluation to determine if the product is Unapproved, Approved, or Approved for Provisional Use
- TWG notifies PEP Engineer of decision on product status
- If product status has changed, PEP Engineer updates product status in VENDOR
- PEP Engineer notifies vendor in writing of the TWGs decision of the product status
- If vendor does not agree with the determined product status, the vendor may elect to appeal the product status for a second and final time. The

- vendor must appeal in writing to the PEP Engineer within 30 days of product status notification
- PEP Engineer submits all product evaluation documentation to Oversight Committee for final decision on product status
- Oversight Committee notifies PEP Engineer of final product status decision.
- PEP Engineer notifies vendor in writing of the Oversight Committee's final decision of the product status
- Oversight Committee decisions are final and no further appeals will be considered

## Annual Product Recertification

For Products with an Approved or Approved for Provisional Use Status:

- Vendors must recertify their product on an annual basis by the 31<sup>st</sup> of January. If a recertification is not received by January 31st, the PEP Engineer will change the product status to "Unapproved"
- Recertification will consist of a statement on company letterhead that the product composition has not changed and all contact information on the original application is correct. If contact information has changed, updated contact information must be included in the statement
- If a **company's name changes**, submit on company letterhead the new company name, as well as the updated contact information
- If the ownership changes by merger or acquisition or if the product is sold, submit on company letterhead the new company/product name, the names and titles of company officers, as well as the updated contact information
- If the composition of the product changes, notify the PEP Engineer in writing as soon as practicable, stating the specific changes and the reason for the changes. Based on the submitted information, the product may be re-evaluated

# Records Retention Policy

The State of North Carolina's records retention policy, as well as the NCDOT Quality Enhancement Unit's records retention policy will be observed.

#### **Disclaimer**

Acceptance of a product for evaluation by the NCDOT is in no way a commitment to purchase, recommend, or specify the product reviewed, regardless of its performance. The vendor shall be responsible for all liabilities and injuries caused by any defect in the design, manufacturing, and/or labeling of their products. The vendor is responsible for keeping NCDOT informed of any changes in the product composition or company structure and contact information. Any changes without proper notification may result in changing the product status to "Unapproved."

PRODUCT EVALUATION PROGRAM TECHNICAL WORK GROUPS								
TWG NAME	ADA-Detectable Warning	Asphalt Pavement Related	Coatings	Concrete Pavement Related	Drainage (Hydro - Pipes, Culverts)	Ероху	Erosion Control	Guardrail-Related
TWG CHAIR	S&RM	M&T	M&T	M&T	HYDRO	M&T	REU	RDU
	CS&DU	SRM	BM	M&T	M&T	M&T	HYDRO	RDU
	SRM	PM		PM	GEOTECH	BMU	M&T	CS&D
	RDU	M&T		SRM	M&T	CU	CS&DU	CS&DU
	RDO	CU		M&T	CU	CO	CS&DO	M&T
				CU				
FHWA REP		FHWA	FHWA	FHWA	FHWA		FHWA	FHWA

# Attachment A (continued)

	PRODUCT EVALUATION PROGRAM TECHNICAL WORK GROUPS – continued							
TWG NAME	ITS-Related	Lighting-Related	Sound Barrier* and Retaining** Walls	Pavement Marking, Sign Apparatus and Delineation	Utility-Related Items	Traffic Signals	Structural Components	Temporary Traffic Control
TWG CHAIR	ITSS	RDU	*Co-Chair STR	S&DU	UTILIT	SM	STR	WZTC
		RDU	**Co-Chair GEOTECH	CU	RDU		M&T	TMU
			GEOTECH	M&T	S&RM		BMU	M&T
			PDEA	S&DU	M&T		GEOTECH	
				S&DU			CU	
FHWA REP	FHWA	FHWA	FHWA	FHWA	FHWA	FHWA	FHWA	FHWA

# Attachment A (continued)

#### Legend

BMU Bridge Management Unit

CS&DU Contract Standards and Development Unit

CU Construction Unit

FHWA Federal Highway Administration

GEOTECH Geotechnical Unit HYDRO Hydraulics Unit

ITSS Intelligent Transportation Systems Section

M&T Materials and Tests Unit

PDEA Project Development & Environmental Analysis Branch

PM Pavement Management
QEU Quality Enhancement Unit
RDU Roadway Design Unit
REU Roadside Environmental Unit
S&DU Signing and Delineation Unit
S&RM Safety and Risk Management
SM Signals Management Unit

SRM State Roadway Maintenance Unit

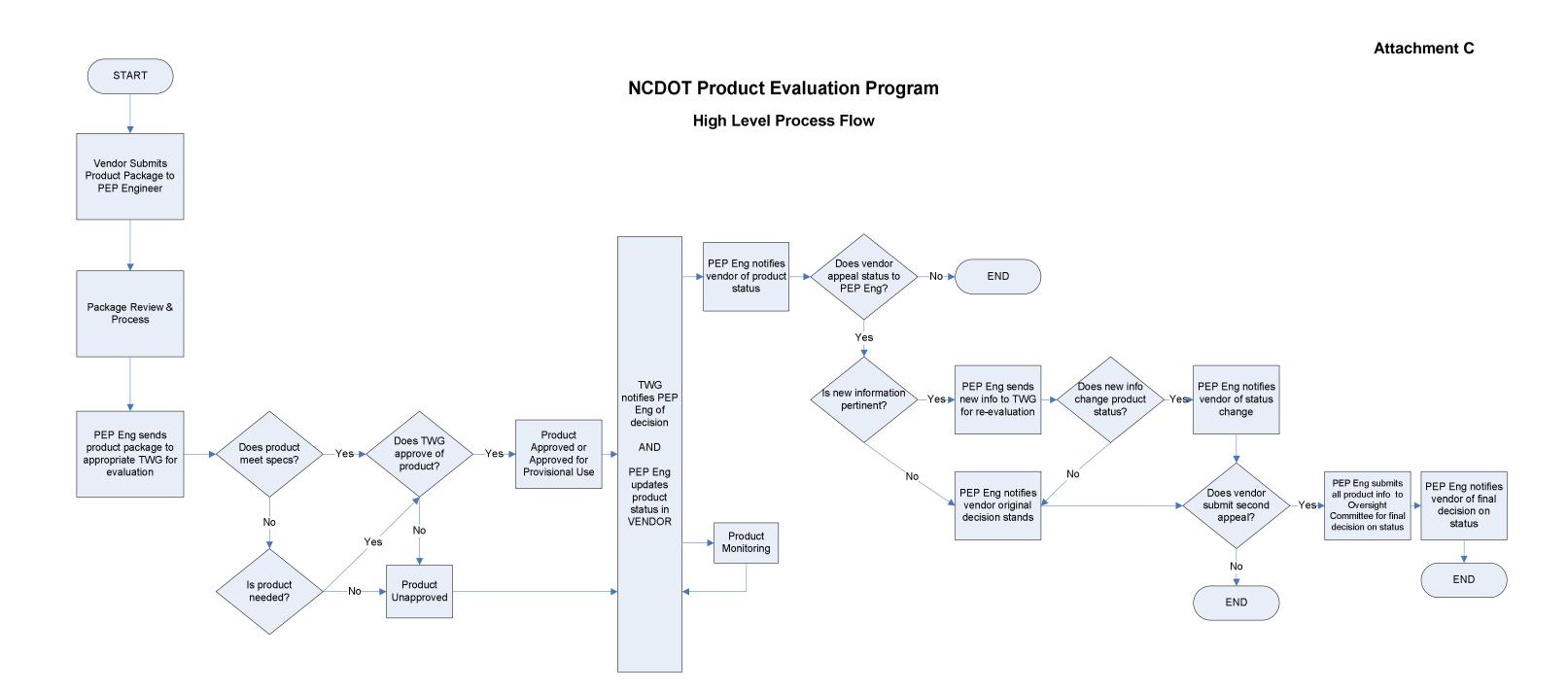
STR Structures Unit

TMU Traffic Management Unit WZTC Work Zone Traffic Control

#### **Attachment B**

## **Oversight Committee Members**

Name	Position	Unit	
Jon Nance	Chief Engineer	Operations	
Lacy Love	Director	Asset Management	
Kevin Lacy	State Traffic Engineer	Mobility and Safety	
Deborah Barbour	Director	Preconstruction	
Edward Parker	Assistant Division Administrator	FHWA	



Product Evaluation Program Guidelines Approved by:

Terry R. Gibson, PE

State Highway Administrator

J. Victor Barbour, PE Administrator of the Technical Services Division